CLASS 8 MATH SYLLABUS 2021-2022

CLASS VIII (MATHEMATICS)

BOOKS PRESCRIBED : MATHMATICS&EXEMPLAR PROBLEMS (N.C.E.R.T)

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	LEARNING OBJECTIVE
PT – 1 25 MARKS	Ch-1 :Rational Number Ch-6:Square and square roots Ch-7:Cube and cube roots Ch-3)Understanding quadrilaterals	Ch-1:Rational Number Ch-6)Square and square roots Ch-7)Cube and cube roots	The learner — • generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns • finds out as many rational numbers as possible between two given rational numbers. • finds squares, cubes and square roots and cube roots of numbers using different methods. • • Solves problems related to angles of a quadrilateral using angle sum property • verifies properties of parallelograms and establishes the relationship between them through reasoning
HALF YEARLY 80 MARKS	Ch-2)Linear eqation in one variables Ch-10)Visualising solid shapes Ch-8)Comparing quantities Ch-13)Direct and inverse proportions	Chap-1) Rational Number Ch-2)Linear eqation in one variables. Ch-3Understanding quadrilaterals Ch-6)Square and square roots Ch-7)Cube and cube roots Ch-8)Comparing quantities Ch-10)Visualising solid shapes Ch-13)Direct and inverse proportions	• solves puzzles and daily life problems using variables. • represents 3D shapes on a plane surface such as sheet of paper, black board etc. • verifies Euler's relation through pattern. • applies the concept of per cent in profit and loss situation in finding discount, VAT and compound interest. e.g., calculates discount per cent when marked price and actual discount are given or finds profit per cent when cost price and profit in a transaction are given. • • Solves problems based on direct and inverse proportions. • solves problems with integral exponents.
PT - 2 25 MARKS	Ch-5)Data handling Ch-9)Algebraic expression and identities Ch-14)Factorization Ch-15)Introduction to graphs	Ch-5)Data handling Ch-9)Algebraic expression and identities Ch-15)Introduction to graphs	• collect data, organise it into groups and represent it into bar graphs/ pie chart • conduct activities related to throwing a large number of identical dice/coins together and aggregating the result of the throws to get a large number of individual events and make assumptions for future events on the basis of the above data.
ANNUAL 80 MARKS	Ch-11)Mensuration Ch-16)Playing with numbers Ch-4)Practical geometry Ch-12)Exponents and powers	Ch-4)Practical geometry Ch-5)Data handling Ch-9)Algebraic expression and identities Ch11Mensuration Ch-12)Exponents and powers Ch-14)Factorization Ch15)Introduction to graphs Ch-16)Playing with numbers	

	SUBJECT ENRICHMENT/ PRACTICAL/ ENGLISH CONVERSATION / VISUAL STIMULUS	PORTFOLIO	MULTIPLE ASSESSMENT
Term1	**Activity 1:**Fold a paper 8times in any way. Unfold and locate various convex and concave polygons. **Activity 2:**To verify that the sum of interior angles of a quadrilateral is 360^0 by paper cutting and pasting **Activity 3:**To verify that the sum of measures of the exterior angles of any polygon is 360^0 by paper cutting and pasting. **Activity 4:** To make the following by paper folding and cutting (i) a kite(ii) a rhombus **Activity 5:**To verify that (i)diagonals of a rectangle are of equal length (ii)diagonals of a square are of equal length(iii)Investigate the results for a rhombus and a parallelogram using stretched threads.	**P1.Constructing a TANGRAM** **Different shapes can be made of Tangram Pieces.Try to form a story using different shapes of animals** **P2 : Drawing a map of YOUR building**	**M.A.1.Solve the given crossword filling up the given boxes. Clues are given below for across as well as downward filling. Also, for across and down clues, clue number is written at the corner of the boxes. Answers of clues have to be filled in their respective boxes.** **M.A.2. M.C.Q. on LINEAR EQUATION**
Term 2	**Activity6:**(GroupActivity)Do a survey of your class and collect the data from all students of your class ..(i)Write how much they spent during a day in the following headings(i)school(ii)homework(iii)play(iv)sleep(v)watching TV (vi) others Represent the information in a Pie chart. **Activity7:**To observe the following number patterns and generate it up to next three steps. **Activity 8:**Draw front view, top view and side view of the following shapes made by unit cubes. Activity 9: Algebra with Paper cutting a+b Square = a square + b square + 2ab Activity 10:To explore the relationship between Length (in cm) and perimeter (in cm) Length (in cm) and area (in cm^2) of 5 squares of different dimensions drawn on a squared paper	**P3. DRAW A DOUBLE BARGRAPH COMPARING UT1 AND UT2 MARKS.** **P4Playing with number game.**	**M.A.3 Cross word puzzle on compound interest .** **M.A.4 M.C.Q. on Factorization**